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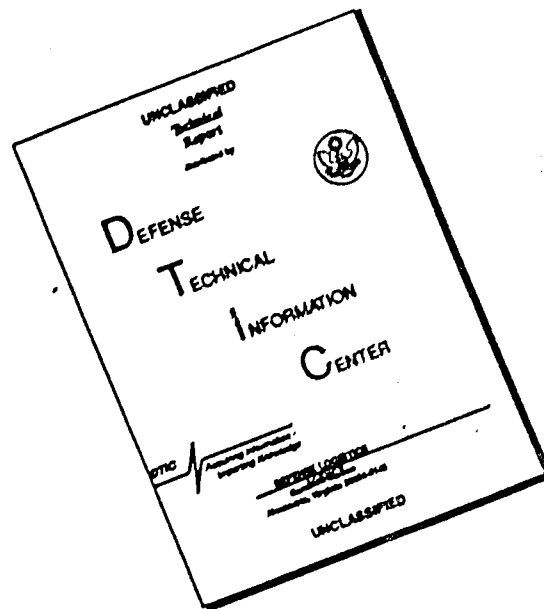
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DEPARTMENT OF THE ARMY
OFFICE OF THE ADJUTANT GENERAL
WASHINGTON, D.C. 20310

IN REPLY REFER TO

AGDA (M) (28 Jan 70) FOR OT UT 694297

2 February 1970

SUBJECT. Operational Report - Lessons Learned, Headquarters, 34th
Engineer Battalion, Period Ending 31 October 1969

SEE DISTRIBUTION

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2. Information contained in this report is provided to insure appropriate benefits in the future from lessons learned during current operations and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

Kenneth G. Wickham

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

1 Incl
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ASSISTANT CHIEF OF STAFF FOR FORCE DEVELOPMENT
(ARMY) ATTN FOR OT UT, WASHINGTON, D.C. 20310

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 34TH ENGINEER BATTALION (CONSTRUCTION)
APO San Francisco 96289

ECBA-OF

14 November 1969

SUBJECT: Operational Report Lessons Learned, 34th Engineer Battalion
(Construction), Period Ending 31 October 1969, RCS CSFOR-65 (R2)

THRU: Commanding Officer, 159th Engineer Group, ATTN: EGB-OP, APO 96491
Commanding General, 20th Engineer Brigade, ATTN: AVEI-COS, APO 96491
Commanding General, US Army Vietnam, ATTN: AVHGC-DST, APO 96375
Commanding General, US Army Pacific, ATTN: GPOP-OP, APO 96588

TO: Assistant Chief of Staff for Force Development, Department of the
Army (ACSFOR-DA), Washington D.C. 20310

Section 1. Significant Organizational Activities

A. General:

1. During the period 1 August thru 31 October 1969 the 34th Engineer Battalion successfully accomplished various engineer construction projects in the III Corps Tactical Zone, Republic of South Vietnam. The battalion was primarily engaged in construction of lines of communication, operational support missions, MACV advisor facilities and base construction. LOC construction included the completion of the asphalt surface course paving of National Highway QL-13 from Phu Cuong to Lai Khe, and the continued upgrading of the Lai Khe Bypass. Operational support missions included an extensive effort on the maintenance of MSR Zinc from Ben Cat to the vicinity of Phuoc Vinh, tests conducted for the USARV Mine Warfare School to determine the size of craters caused by various demolition charges, construction of perimeter bunkers for the MACV Phu Cuong compound, revetments at Fire Support Base Claudette, and the upgrade and maintenance of the Phu Loi Base Camp Perimeter Bunkers. The battalion was also engaged in construction of various MER latrines and showers, cantonment areas for MACV advisor teams, asphalt paving of base camp roads, and the maintenance and repair of major roads. Horizontal and vertical construction was accomplished by the battalion at Phu Loi, Di An, Lai Khe, Phu Cuong, Lai Thieu, Lam Son and Ben Cat.

2. The battalion area of operation and line of communication responsibility (overlay) for the reporting period is at Inclosure 1.

B. Command: LTC William N. Millward, Jr. remained in command of the 34th Engineer Battalion throughout the reporting period. Major personnel changes include the reassignment of CPT Bobby L. Vines as C Company Commander, replacing

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Inclosure

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CPT Douglas V. Myers who was reassigned to the Battalion S-3 Section. CPT Alan D. Bowlsby was assigned as the Battalion S-4 replacing 1LT John Bermensolo who was assigned as the property book officer following the departure of C.2 Roland G. Hall. CPT James W. Rundquist was assigned as A Company Commander replacing CPT Daniel D. Danaher Jr. who returned to CONUS. 1LT Kenneth D. Coleman was reassigned as D Company Commander replacing CPT Stephen M. Gamble who was reassigned to the Battalion S-3 Section. CPT Robert L. Snearley was assigned as the Battalion Adjutant replacing CPT Norman A. Dobbs who returned to CONUS. 1LT Thomas G. Richards was reassigned as Headquarters Company Commander replacing 1LT Ronald Kenny who returned to CONUS.

C. Personnel, Administration and Morale:

1. The average enlisted strength for the battalion for the quarter was 727, which represents 104% of authorized enlisted strength. The average officer strength was 38, which represents 97.4% of authorized strength. There are significant personnel shortages in the MOS's of 51H40 and 62N40. At the end of the reporting period this battalion had 20 of 36 authorized 51H40's and 15 of 24 authorized 62N40's.

2. Major effort during the period was concentrated on in-processing and out-processing of personnel and updating military personnel records. A total of 140 personnel completed their tour and 92 personnel were in-processed. There were 68 foreign service tour extensions in the Battalion this reporting period.

3. During the period there were 107 Article 15's, 7 Special Court Martials, and 5 Summary Court Martials. Three personnel were processed for administrative separation from the service under the provisions of AR 635-212.

4. There were no significant medical problems affecting battalion personnel. There were no reported cases of malaria.

5. There were 8 Congressional Inquiries this reporting period.

6. There were 104 decorations and awards received by personnel in the battalion during the reporting period. These decorations and awards included 18 Bronze Stars, 30 Army Commendation Medals, 1 Purple Heart, and 55 20th Engineer Brigade Certificates of Achievement.

7. Morale and Espirit de Corps within the command are excellent.

8. The battalion currently employs 400 local nationals. These local nationals include those employed with MCA and O&MA funds implementing Programs 5 and 6, to include skilled electricians, plumbers, carpenters, masons and drivers; those employed by AIK funds who are unskilled laborers; and those employed with non-appropriated funds as housemaids. These civilian personnel are distributed as follows:

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	<u>O&MA</u>	<u>MCA</u>	<u>AIK</u>	<u>Housemaids</u>
Hq Co.	22	9	3	16
A Co.	33	0	0	25
B Co.	25	16	4	19
C Co.	29	42	1	20
D Co.	<u>34</u>	<u>84</u>	<u>0</u>	<u>15</u>
Total	143	151	11	95

Of the 143 local nationals employed thru O&MA funds, 31 are hired against Program 5 authorizations. These personnel are employed as kitchen police and latrine burners. The remaining 112 O&MA employees are hired thru Program 6 authorizations. Program 6 authorizes 306 local nationals to replace the 204 military spaces withdrawn from this command. The most critical shortages of Program 6 employees exists in the Heavy Truck Driver's skill. Of the 130 heavy truck drivers and heavy truck driver leaders authorized, only 6 are currently employed. This shortage exists because local nationals with the required skills are unavailable for hire. A similar shortage exists in the light truck driver skills. The battalion is authorized 43 light truck drivers, but had only 18 employed at the end of this reporting period. A civilian hiring freeze implemented by HQ, USARV has been in effect during the entire reporting period. There have been no significant problems in the other skill areas. The shortage of local national truck drivers has caused a drain on the military personnel strength of all units in the battalion, and has had a significant impact on the production capability of the vertical construction platoons. Enlisted carpenters, plumbers and masons have been assigned as truck drivers in order to accomplish the battalion's critical LOC mission.

D. Intelligence, Counterintelligence and Security:

1. Intelligence reports from the Base Defense Officer and other US units located at Phu Loi are received and processed by the Battalion S-2. These reports, along with intelligence documents from the 159th Engineer Group, II FFORCEV, and other headquarters, are utilized for determining local security requirements.

2. This headquarters continues to handle personnel security actions, e.g., validation of clearances up to and including TOP SECRET, granting of CONFIDENTIAL clearances, and approval of interim SECRET clearances.

3. The 34th Engineer Battalion has responsibility for the Castle Sector of the Phu Loi Base Camp Perimeter. Castle Sector includes eight (8) defensive bunkers and one (1) guard tower. A command bunker was constructed on the

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bunker line during this reporting period from which the officer of the guard controls all perimeter defensive positions in Castle Sector. Operations and communications sections for the Battalion are located within the battalion TOC bunker in the Battalion Headquarters area.

4. This battalion provides a 54-man Ready Reaction Force for employment as required by the Base Commander at Phu Loi and a 54-man Ready Reserve Force for employment in the Castle Defense Sector.

E. Plans, Operations, and Training:

1. During this reporting period the battalion was engaged in preparing plans for the 1970 MCA/LOC Upgrade Program. This planning includes acquisition of real estate, survey, reconnaissance, design and programming of materials, equipment and construction effort for the upgrade and asphalt paving of 39.8 kms of TL 2A/LTL 1A from QL-13 to the north end of Phuoc Vinh Base Camp.

2. Estimates and preliminary plans were made for the battalion to assume responsibility for a portion of the II FFORCEV Secondary Road Construction Program.

3. The entire effort of this battalion was committed to MSR Zinc during the critical period 20 September 1969 to 12 October 1969. During this period all other projects were suspended. From the initiation of the MSR Zinc operational support maintenance mission on 6 August 1969 until the end of this reporting period, this battalion hauled and placed 17,880 CY of rock, constructed and emplaced 500 meters of corduroy road utilizing 1,500 creosoted telephone poles, and expended 72,680 man hours. The corduroy road constructed of 12 to 18 inch diameter telephone poles and $\frac{1}{2}$ " cable is the first of its type to be built in RVN, and has shown excellent durability.

4. The 34th Engineer Battalion remained heavily committed on construction projects in RVN. Effort on Operational Support missions and LOC projects increased significantly, reflecting the large reduction of effort on base construction projects. The 34th Engineer Battalion (-) and the Asphalt Platoon of the 103rd Engineer Company remained at Phu Loi during the reporting period. The earthmoving platoons of B and D Companies remained at Lai Khe. The Earthmoving Platoon of C Company returned to Phu Loi from Lai Khe to perform minor earthmoving tasks until the monsoon rains allowed earthmoving work to resume on the Lai Khe Bypass.

5. The battalion continued to gain valuable experience in both vertical and horizontal construction. During the reporting period 3,001 SF of buildings were completed, 252 CY of concrete were poured, 21,890 CY of laterite and earth fill were hauled, graded and compacted, 1,029 LF of culverts were installed, 26,523 tons of asphalt were placed, and 17,880 CY of rock were hauled and placed.

6. The battalion operated a prefabrication facility utilizing local

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civilian labor at Phu Loi. This facility constructed 1,404 SF of latrines and showers and prefabricated various roof trusses and building panels.

7. There were 41.10 inches of rainfall during this reporting period at Phu Loi. Lai Khe experienced 62.71 inches of rainfall causing work stoppage on the Lai Khe Bypass for 81.5 of the 92 possible working days during this reporting period.

8. A resume of construction projects assigned to the battalion that were completed this period is as follows:

a. QS 217-5805-0-20, Repair Aircraft Revetment, Di An, B Co: Existing revetment reinforced, capped with corrugated tin, and stabilized using deadmen and knee bracing.

b. CD 391-5309-0-20, MER Latrines and Showers, Various Locations, D Co: Of the 75 latrines and 50 showers authorized in the scope, 41 latrines and 24 showers were constructed prior to termination of the project by higher headquarters.

c. CD 243-5854-0-20, Crater Dimension/Explosive Charge Weight Test Program, D Co: Tests satisfactorily carried out with personnel from the USARV Mine Warfare Center present.

d. QS 273-5921-0-20, Revetment, FSB Claudette, B Co: Revetment built using empty asphalt drums and laterite.

e. CD 812-0302-0-01, MACV Advisor Facilities Upgrade, Ben Cat and Lam Son, D Co: Plumbing and sewage system placed in Lam Son; all buildings, bunker, latrines, and plumbing completed at Ben Cat.

f. CD 812-0303-0-01, MACV Advisor Upgrade, Lai Thieu, D Co: Tower and tank, plumbing, and earthwork accomplished.

g. CD 391-5310-2-20, MER Latrine for 34th EBC, D Co: Constructed one four hole latrine (108 SF).

h. IS 159-68-008, Maintenance and Operation of Asphalt Plant, Phu Loi, B Co: Closed out upon receipt of new directive. Plant produced 104,679 tons of asphalt hot mix under this directive.

i. CD 391-5310-3-20, MER Latrines for 3rd Bde, 82nd AB, Phu Loi, D Co: Constructed four 4-hole latrines.

j. CD 391-5310-6-20, MER Latrines and Shower for 3rd Bde, 82nd AB, Phu Loi, D Co: Constructed one 4-hole latrine and one 4-head shower.

9. A resume of the active construction projects assigned to the battalion is as follows:

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- a. CD 12-231-01-T-7S, Site Preparation, Phu Loi Power Plant, C Co:
Constructed berms and improved drainage. 96% complete.
- b. CD 773-0301-0-01, Material Issue, ROKFV Naval HQ Building, Bn S-4:
Issued all materials except air conditioners. 97% complete.
- c. CD 451-5301-0-20, Maintenance and Operation of the Asphalt Plant, B Co: Produced 4,110 tons of asphalt this reporting period under this directive, primarily for LOC roads. Continuous projects.
- d. CD 51-222-01, Paving Base Camp Roads, B Co: Paved 4,900 meters of roads on Phu Loi Base Camp. 19% complete.
- e. CD 212-5829-0-20, MER Maintenance, Ben Cat (MSR Zinc), Bn (-):
Major effort expended for four weeks, minor repairs continue. Used 17,880 CY of rock and placed 1,500 telephone poles to construct 500 meters of corduroy road. Continuous project.
- f. CD 251-5730-0-20, Maintenance Base Camp Perimeter, Phu Loi, B, C, and D Co: Completed rebuilding of bunkers and replacing of fougasse. A command bunker was constructed. In process of repairing or replacing perimeter wire, erecting perimeter lights, and removing vegetation for fields of fire. Continuous project.
- g. CD 351-5301-0-20, MER for 3rd Bde, 82nd AB, C and D Co: Paved concrete pad, assisted in pouring two other pads with 82nd AB self help. 40% complete.
- h. CD 217-5901-0-20, Upgrade Di An ASP, C Co: Hauled 880 CY laterite to build berms and provide drainage. 20% complete.
- i. CD 207-5832-0-20, Perimeter Bunker Construction, Phu Cuong, D Co:
Built eleven of the 12 required bunkers. 93% complete.
- j. CD 12-260-01, MACV Upgrade, Phu Cuong, D Co: Completed all facilities except well and generator. 96% complete.
- k. CD 98-217-LOC Restoration, QL-13, Bn (-): Placed 11,890 tons of asphalt surface course this reporting period. Completed last culvert except for headwalls. Rock shoulders remain to be done. 95% complete.
- l. CD 440-0301-0-01, LOC Construction, Lai Khe Bypass, Bn (-): Minor earthfill work accomplished this reporting period due to monsoon rains and high priority effort on MSR Zinc. 50% complete.
- m. CD 98-201-15-T-MA, LOC Road Maintenance, B and C Co: Built revetments and placed 3,299 tons of asphalt hot mix in patching operations on QL-13 and MSR 25. Continuous project.

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10. Inclosure 2 is a listing of all projects assigned to the battalion which were not worked on this reporting period.

11. New personnel arriving in-country received formal replacement training. Personnel from the battalion attended replacement training schools conducted at Phu Loi and Bien Hoa. Orientation classes were also held for new personnel in the companies and at battalion.

12. Command Information topics were conducted weekly by the Company Commanders or their representatives.

13. Character Guidance classes were conducted on a monthly basis by the Battalion Chaplain. Attendance for the battalion averaged 100% of the personnel present for duty for this reporting period.

14. Range firing was conducted monthly throughout the reporting period. Personnel fired their assigned weapons for zeroing and familiarization. Personnel were also given instruction on the safety principles of all organic weapons.

15. A vigorous safety program remained in effect during the reporting period. Special emphasis was placed on weapons safety, driving safety and precautions to be taken when operating heavy equipment and power equipment and tools.

16. Special Officer and NCO classes were held in preventive maintenance, in the dangers of marijuana and in military justice. Periodic classes for all personnel were held in anti-sapper training, job site security and safety. Continued emphasis was placed on the training program and the updating of training records.

F. Logistics:

1. Critical shortages of material were: 1 x lumber, 2 x lumber, 4 x 4 lumber, all sizes of plywood, cement, $\frac{1}{2}$ " pipe and $\frac{1}{2}$ " pipe fittings. These materials were requisitioned and follow-ups were performed at regular intervals. When feasible, substitute materials were used in lieu of these shortage items.

2. At the end of the reporting period the battalion was short the following major TO&E items: One 600 CFM air compressor, three 250 CFM pneumatic tool and compressor outfits, two 20 ton cranes, one 40 ton crawler crane, one ditching machine, three 5000 gallon water tankers, one water distributor, nine generators (one 100 KW, three 10 KW, four 5 KW, one 1.5 KW), two road graders, one 16S concrete mixer, one 10 ton roller, two shop equipment contact trucks, three 25 ton lowbed trailers, twelve 5 ton dump trucks, one earth auger polesetter truck, two 5 ton tractors, one 10 ton tractor, and one $\frac{1}{2}$ ton truck.

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3. The following TO&E items were received this period: Three 2½ yard scoop loaders, one 12½ ton crawler mounted crane, four D7E tractors, two 5 ton truck tractors, three 290M tractors, one rock drilling set, five 5 ton dump trucks, one 60 ton flatbed trailer, one 3/4 ton cargo truck, and six ½ ton trucks.

4. Combat damage during the reporting period was one each 290M tractor, which suffered moderate, repairable damage to the tire and wheel.

5. Command emphasis has continued in the area of supply accountability and reports of survey. During the period nine reports of survey were initiated, representing a loss of \$ 3,961.06.

6. The battalion average deadline rate at the end of this reporting period was 20.6% which is an increase of 9.5% over the previous reporting period. This increase is due to the heavy use of equipment and vehicles in the emergency maintenance mission on MSR Zinc.

7. PLL items on hand are at 65% fill and ASL items are at 56% fill. Fill on Red Ball requisitions over the last 90-day period are as follows:

- a. 60 - 90 days: 50%
- b. 30 - 60 days: 48%
- c. 0 - 30 days: 21%

G. Command Management:

1. The projects and missions assigned to the battalion are managed by the Battalion Operations Officer. Daily operations meetings are held at battalion and company levels to coordinate equipment and projects, to survey requirements, to assess and reevaluate priorities and to resolve problem areas. Command and staff meetings are held twice a week to review battalion progress, to disseminate command guidance and policy, to exchange information, and to discuss future operations.

2. Upon receipt of a project directive, a battalion directive is assigned to a company for execution. The S-3 Section provides the design and specifications, if not provided by higher headquarters, to accompany the battalion directives. The company is then responsible for submitting a complete bill of materials (BOM), construction plan, construction schedule, drainage plan (if applicable), and safety plan to the S-3 for approval. Construction inspectors within the S-3 Section check for quality control and resolve problems that may arise. In specified cases, close coordination with base development boards is maintained, as required.

H. Inspector General: Four informal IG complaints were received during this reporting period.

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I. Information: The 34th Engineer Battalion receives the following newspapers: The Army Reporter, The Castle Courier and The Laterite Lantern. The Pacific Stars and Stripes is distributed daily throughout the 34th Engineer Battalion. The battalion publishes and distributes the monthly newspaper - Volcano. The battalion receives the following magazines: Army Commanders Digest, The Army Digest, Aviation Digest, and Research and Development. Hometown news releases and unit news stories are submitted through the 34th Engineer Battalion on a weekly basis. A total of 258 hometown news releases were submitted during this reporting period.

J. Civic Affairs:

1. During the reporting period, the battalion continued to support the Phu Cuong Hospital through the MEDCAP Program. Heavy project commitments of the 34th Engineer Battalion have precluded extensive expenditure of effort for civic action construction.

2. The battalion chaplain continued to make periodic visits to the local Vietnamese schools, churches and orphanages during the reporting period. This activity has greatly aided US - VN relations.

SECTION II. Lessons Learned: Commander's Observations, Evaluations, and Recommendations:

A. Personnel: None

B. Intelligence: None

C. Operations:

1. Employment of Corduroy Road:

a. Observation: In heavy rains many Vietnamese roads are too unstable to support heavy traffic. Large ruts and holes form, collect water, and the road subbase becomes so saturated that wheeled vehicles become hopelessly mired in mud.

b. Evaluation: Many unstable areas in the Vietnamese roads can be adequately stabilized with a combination of blast rock and laterite. However, on FSK Zine this battalion encountered several hundred meters of road which refused to accept the large blast rock. This section of road was surrounded by low lying fields and had inadequate drainage. The subbase of the road was saturated with water, and rock used on the road quickly sank out of sight or was squeezed out to the side of the road, failing to achieve stabilization.

c. Recommendation: For short stretches of road exhibiting extremely unstable characteristics, corduroy roads may be utilized. (See SECTION II, para C2) Though expensive in terms of labor and materials, it provides a durable travel surface that can be utilized by the heaviest division load as soon as it is employed.

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2. Construction of Corduroy Road:

a. Observation: When placing corduroy road over extremely unstable roadbeds, the logs must be securely attached to each other to prevent excessive movement under heavy loads.

b. Evaluation: The strength of the fastening device between the individual logs must be determined by the weight and type of vehicles expected to pass over the corduroy road. The road constructed on MSR Zinc was expected to carry divisional loads. Creosoted telephone poles and 2" cable were used for the corduroy road. Holes were drilled through the logs (24 to 26 feet in length) about five feet from each end. Through these holes the half inch cable was strung. After passing through the hole in each log, the cable was wrapped one turn around the log before being threaded into the next log. (See sketch II-1). This threading and lacing process was used to connect sections of 10 to 12 logs together before they were emplaced. This method thoroughly restricts lateral and vertical movement of the logs.

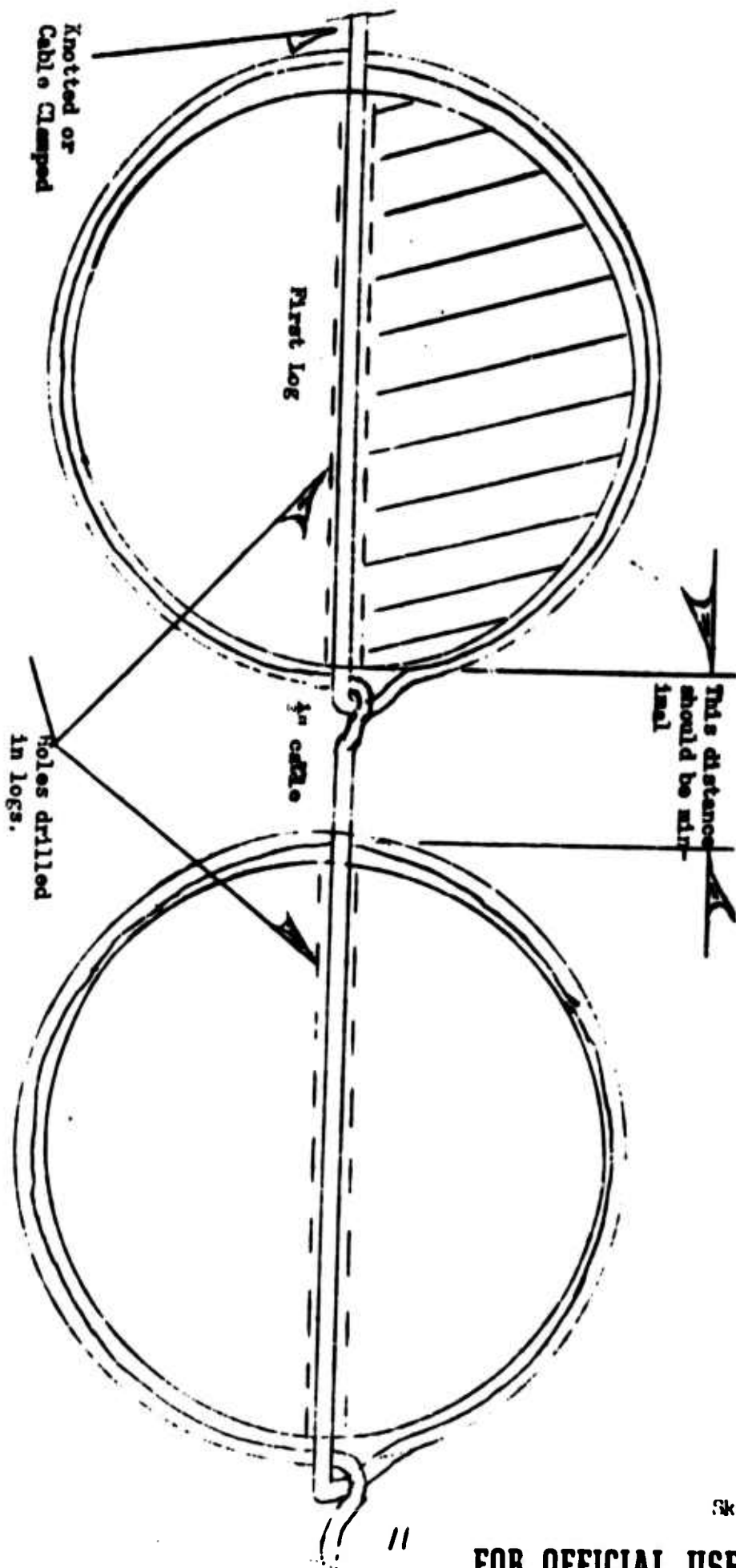
c. Recommendation: That heavy cable be used in the manner described in para 2b above when placing a heavy corduroy road section. The method of lacing the cable proved highly satisfactory for the heavy poles used since they were nearly all relatively straight. The use of crooked logs or logs widely varying in diameter could prohibit the use of this technique.

3. Emplacement of Corduroy Road:

a. Observation: In building a corduroy road in a section of road that must remain open to limited traffic during construction, on site construction is difficult.

b. Evaluation: If traffic is to continue to pass, the actual construction of the corduroy must take place off of the roadway. On MSR Zinc, the roadway to be corduroyed was effectively a defile, i.e., neither side of the road offered working area for corduroy construction.

c. Recommendation: That the logs be assembled in sections of 10 to 12 logs in the manner described in SECTION II, para C2 above. These sections can then be towed by a bulldozer to the laydown site without slowing traffic for more than a few minutes at a time. Removable cable slings should be used to tow the bundles. If the roadway is restricted in width, one sling can be used to tow the logs parallel to the roadway centerline; otherwise, two slings should be used to tow the logs perpendicular to the direction of movement. Once the section is placed next to the previously emplaced bundle, a D/E should be used to push the logs snugly into place, eliminating any small gaps between logs. The D/E should then walk onto the bundle, one side of the bundle at a time, and employ a twisting action to embed the logs in the soft roadbed. A cap of 2" (-) rock can be evenly spread over the corduroy log sections to provide a smooth travelway.



Sketch II-1

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4. Drainage in Culvert Subbase:

a. Observation: After digging out the roadbed for a culvert, it was noted that several underground springs were released into the culvert's bed.

b. Evaluation: Seepage from underground springs in a culvert subbase will lead to a washing-out of the subbase and eventual failure of the culvert. Since the siting of the culvert could not be changed, the water from the underground springs had to be given a channel to escape harmlessly from the culvert subbase.

c. Recommendation: That a one foot thick layer of 4" minus rock be used to serve both as base stabilization and to establish a french drain in the base of the culvert structure. The concrete headwall should be installed to a depth of two feet below the lower level of the 4" minus layer of rock. This will prevent undermining of the headwall. At the lower level of the layer of 4" minus rock sections of 2" pipe should be placed through the concrete headwall on 12" centers to provide "weep holes" for the escape of the spring water. This will prevent the subbase destruction that underground springs can cause.

D. Organization: None

E. Training: None

F. Logistics: None

G. Communications: None

H. Material: None

I. Other: None

Wm N Millward Jr.

M. N. MILLWARD, JR.
LTC, CE
Commanding

~~2-Incl~~

~~1. Overlay of Area of Operation
and I&C responsibility~~

~~2. Innovative projects~~

Incls wd HQ, DA

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EGB-OP (14 Nov 69) 1st Ind
SUBJECT: Operational Report Lessons Learned, 34th Engineer Battalion
(Construction), Period Ending 31 October 1969, RCS CSFOR-65 (R2)

DA, HQ, 159th Engineer Group, APO 96491 22 November 1969

TO: Commanding Officer, 20th Engineer Brigade, ATTN: AVBI-OS, APO 96491

1. Submitted in accordance with USARV Regulation 525-15, dated 13 April 1969.

2. Comments are made on the following paragraphs:

a. Section 1, paragraph c: This headquarters requested lifting of the hiring freeze from 20th Engineer Brigade on 19 September 1969.

b. Section 1, paragraph f: The commander's critical items list has been used to report listed shortages to higher headquarters. The report has aided in verification of validity of requisitions but has not directly assisted in procuring equipment more rapidly.


J. K. BRATTON
COL, CE
Commanding

CF:
CO, 34th Engr Bn

AVBI-US (14 Nov 69) 2nd Ind

SUBJECT: Operational Report Lessons Learned, 34th Engineer Battalion
(Construction), Period Ending 31 October 1969, EC
C-FOR-65 (R2)

HA, HEADQUARTERS, 20TH ENGINEER BRIGADE, APO 96491 **07 DEC 1969**

TO: Commanding General, United States Army Vietnam, AFM: AVHRC-
DSF, APO 96375

1. Submitted in accordance with U RV Regulation 525-15, dated
13 April 1968.

2. Subject report has been reviewed by this headquarters and is
considered adequate.

FOR THE COMMANDER:


S. B. KENNEDY
1st Lt, ATC
Adjutant

CF:
CO, 159th Engr Gp
CO, 34th Engr Bn

AVHGC-DST (14 Nov 69) 3d Ind
SUBJECT: Operational Report Lessons Learned, 34th Engineer Battalion
(Construction), Period Ending 31 October 1969, RCS CSFOR-65 (R2)

HEADQUARTERS, UNITED STATES ARMY, VIETNAM, APO San Francisco 96375 OMI 369

TO: Commander in Chief, United States Army, Pacific, ATTN: GPDP-DT,
APO 96558

1. This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 31 October 1969 from Headquarters, 34th Engineer Battalion (Construction).

2. Reference item concerning "Employment of Corduroy Road", page 9, paragraph C1; concur. However this method of construction is applicable only when the road is considered essential to support operations and alternate methods of construction are not feasible.

FOR THE COMMANDER:



MAJ. GEN.
Assistant Adjutant General

Cy furn:
34th Engr Bn
20th Engr Bde

GPOP-DT (14 Nov 69) 4th Ind

SUBJECT: Operational Report of HQ, 34th Engineer Battalion (Construction)
for Period Ending 31 October 1969, RCS CSFOR-65 (R2)

HQ, US Army, Pacific, APO San Francisco 96558 15 JAN 70

TO: Assistant Chief of Staff for Force Development, Department of the
Army, Washington, D. C. 20310

This headquarters concurs in subject report as indorsed.

FOR THE COMMANDER IN CHIEF:


D. A. TUCK
CPT. AGC
ASST AG

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